

# Wisconsin Department of Transportation

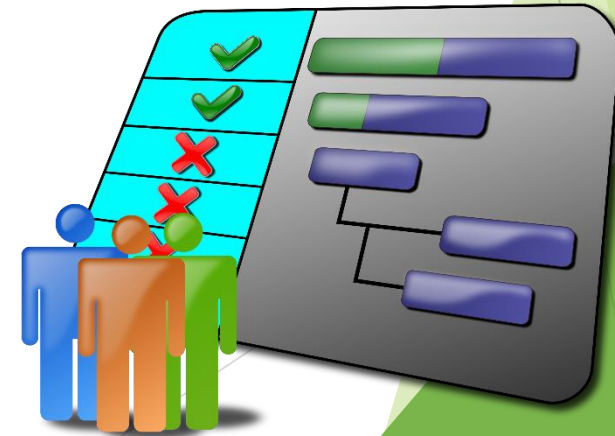
## Masterworks Implementation Overview



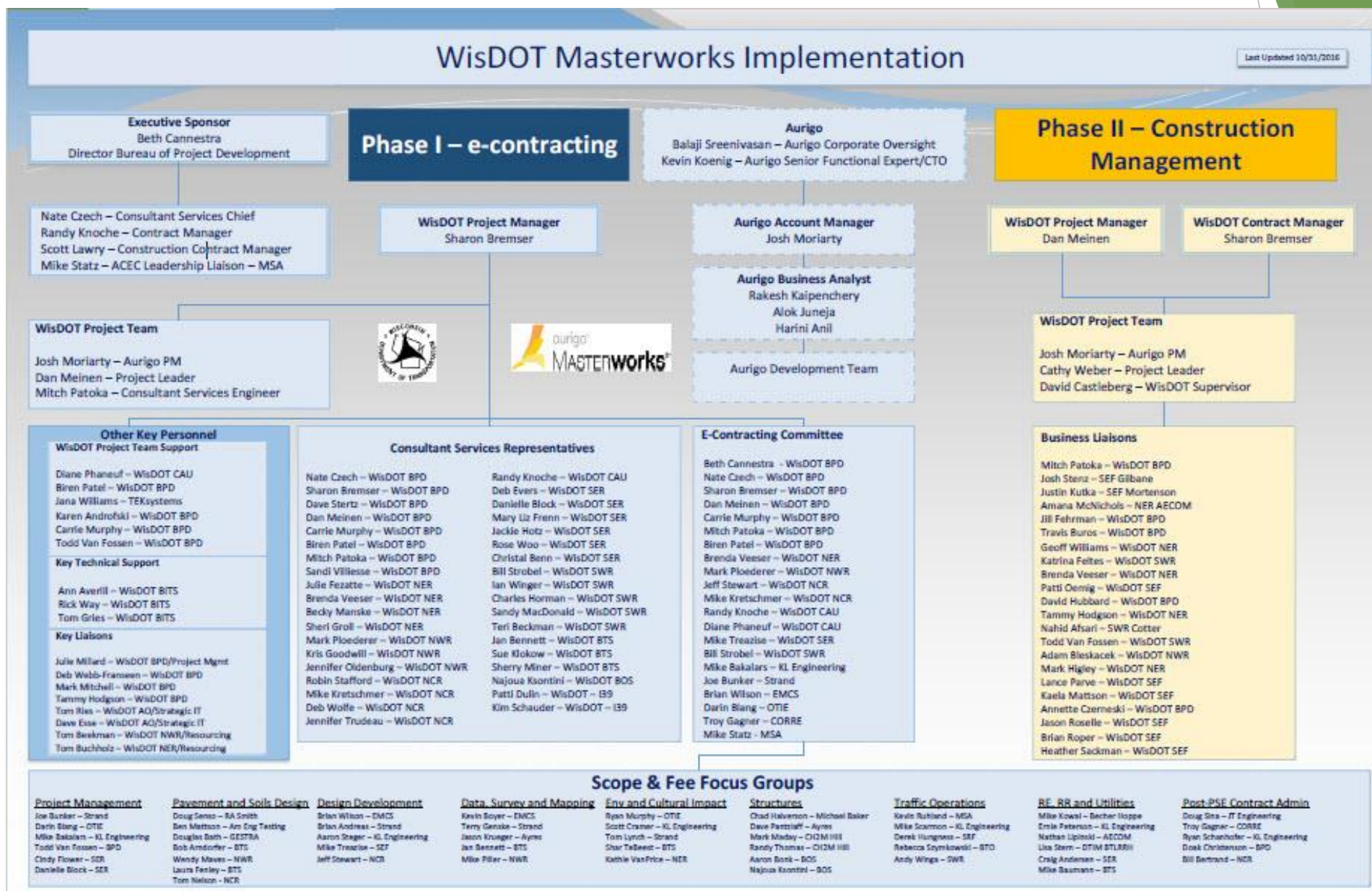
# Implementation Objectives

Objective: Improve and standardize **cost estimating and scheduling of delivery services and non-delivery work:**

- Standardize work break down structure
- Standardize resource type and time for complexity of projects
- Standardize methodology for risk and cost estimating
- Standardize scheduling milestones
- Standardize activity tracking
- Automate sharing of information between systems



# People



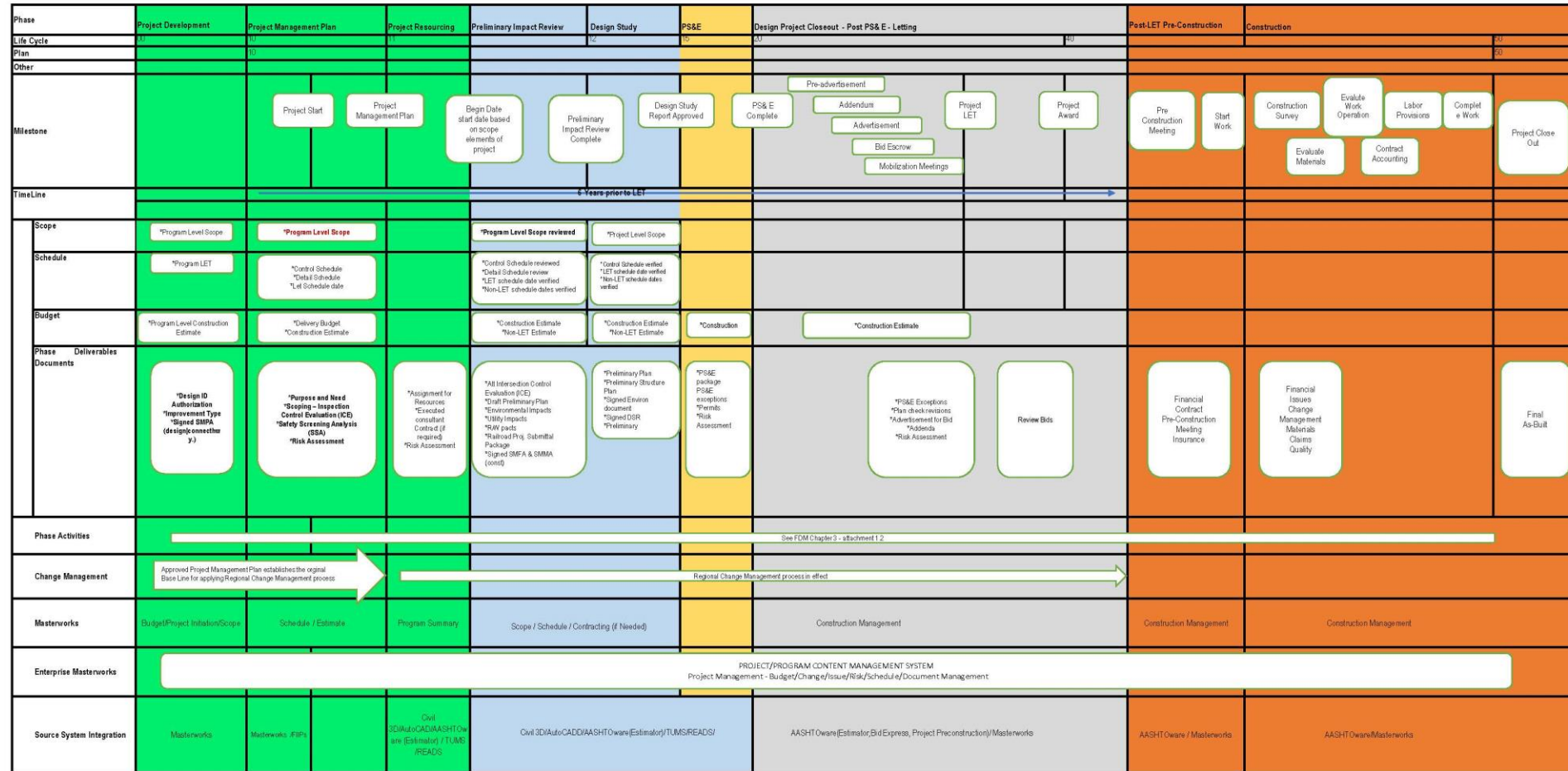


# Scope of Functionality in Masterworks

- ▶ Masterworks will be used by all functional areas of WisDOT.
  - ▶ Planning, scoping and scheduling a services to deliver project
  - ▶ Estimating cost of delivery of a project
  - ▶ Preliminary estimating construction costs of a project
  - ▶ Issue, risk and change management for a project
  - ▶ Document management of all project related information
  - ▶ Work - flow management
  - ▶ Project reporting
  - ▶ Program and performance reporting



# Facility Development Process



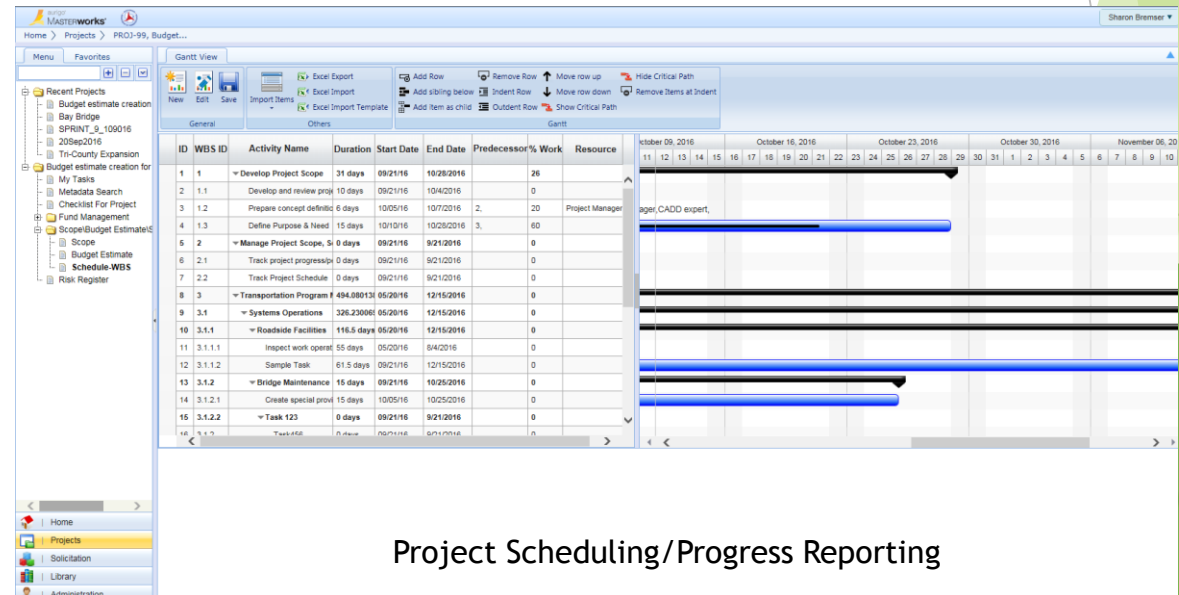


# Work Breakdown/Resourcing/Scheduling

Name
<input type="checkbox"/> <input type="checkbox"/> Project Management
<input type="checkbox"/> <input type="checkbox"/> Scope, Schedule and Change Management
<input type="checkbox"/> <input type="checkbox"/> Budget, Cost, Procurement and Resource Management
<input type="checkbox"/> <input type="checkbox"/> Quality and Risk Management
<input type="checkbox"/> <input type="checkbox"/> Communication and Stakeholder Management
<input type="checkbox"/> <input type="checkbox"/> Preliminary and Final Design
<input type="checkbox"/> <input type="checkbox"/> Pavement and Soils Design
<input type="checkbox"/> <input type="checkbox"/> Engineering and Plan Development
<input type="checkbox"/> <input type="checkbox"/> Data, Survey, and Mapping
<input type="checkbox"/> <input type="checkbox"/> Environmental and Cultural Impact
<input type="checkbox"/> <input type="checkbox"/> Structures
<input type="checkbox"/> <input type="checkbox"/> Traffic Operations
<input type="checkbox"/> <input type="checkbox"/> Real Estate, Railroad and Utilities
<input type="checkbox"/> <input type="checkbox"/> Construction Management
<input type="checkbox"/> <input type="checkbox"/> Post-PSE through Letting
<input type="checkbox"/> <input type="checkbox"/> Post-Let Pre-Construction Project Management
<input type="checkbox"/> <input type="checkbox"/> Construction Contract Administration
<input type="checkbox"/> <input type="checkbox"/> Program Management
<input type="checkbox"/> <input type="checkbox"/> Policy Development and Program Controls
<input type="checkbox"/> <input type="checkbox"/> Systems Planning
<input type="checkbox"/> <input type="checkbox"/> Systems Operations
<input type="checkbox"/> <input type="checkbox"/> Technical Services

Budget Estimate Details Direct Labor Cost Direct Cost Fixed Fee Indirect Cost Risk							
General		Others		Activity / Task Details			
Name	Order ID	Task Description	Resource Type	Structure ID	Contract Function	Hours	Amount
<input type="checkbox"/> <input type="checkbox"/> Program Level Scoping	1						
<input type="checkbox"/> <input type="checkbox"/> Determine Project Program	1.1	Program	Consultant			20.00	
<input type="checkbox"/> <input type="checkbox"/> Prepare STIP and TIP	1.2	STIP and TIP	Consultant			15.00	
<input type="checkbox"/> <input type="checkbox"/> Develop Project Scope	2		WisDOT			25.00	
Total Hours : 177.00							Total Amount

Scoping, Estimating, Resourcing Delivery Work Tasks



WisDOT Work Breakdown Structure

Project Scheduling/Progress Reporting

# Resourcing

Budget Estimate Details								
Direct Labor Cost								
Direct Cost								
Fixed Fee								
Indirect Cost								
Risk								
General								
Others								
Activity / Task Details								
Associate Structure ID								
Associate Contract function								
Name	Order ID	Task Description	Resource Type	Structure ID	Contract Function	Hours	Amount	
<input type="checkbox"/> Program Level Scoping	1							
<input type="checkbox"/> Determine Project Program	1.1	Program	Consultant			20.00		
<input type="checkbox"/> Prepare STIP and TIP	1.2	STIP and TIP	Consultant			15.00		
<input type="checkbox"/> Develop Project Scope	2							
Total Hours : 177.00							Total Amount	

Convert

Select

File Edit View Favorites Tools Help

Internet Explorer cannot d... Aurigo - Best Capita

MASTERWORKS

Sharon Bremser

Home > Projects > 4000-56-79, Spr...

Menu Favorites

Recent Projects

Sprint 13 demo

Sprint 13 demo

My Tasks

Metadata Search

Checklist For Project

Fund Management

Scope/Budget Estimate/S

Scope

Budget Estimate

Schedule-WBS

Project Calendar

Risk Register

New Task

Save & Continue

Save Cancel

General

Activity : Program Level Scoping

Task : Determine Project Program

Description : Program

Unit : HRS

Complexity : Medium

Unit Price in \$ : 1,255.00

Amount in \$ : 1,255.00

Notes :

Select Task from Library

WBS Type : WisDOT WBS

Ignore Activity of WBS Type

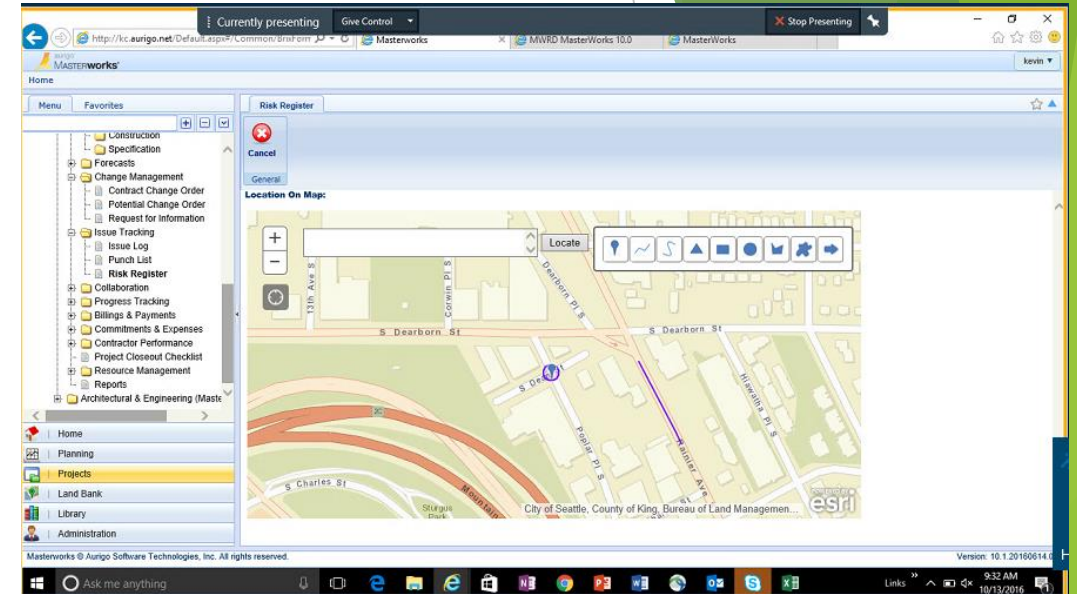
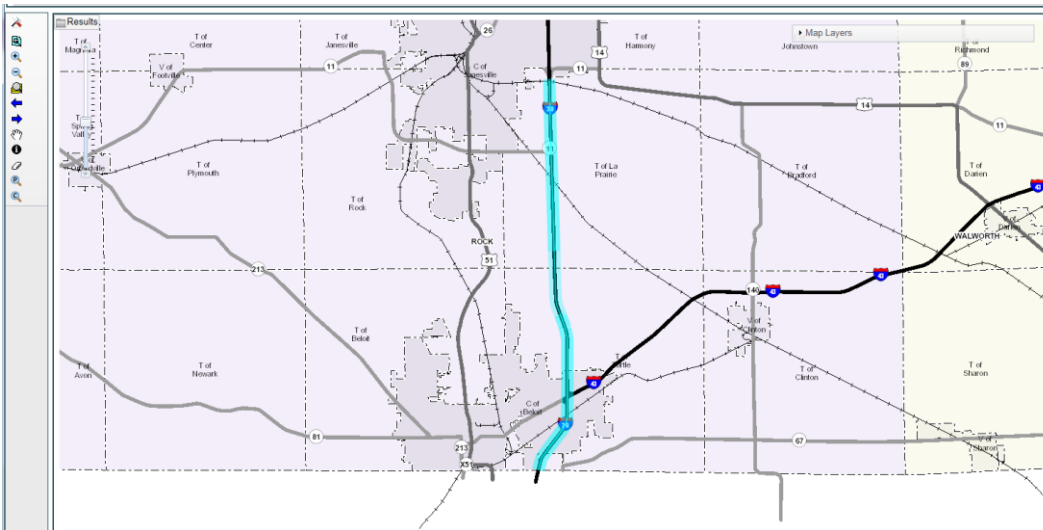
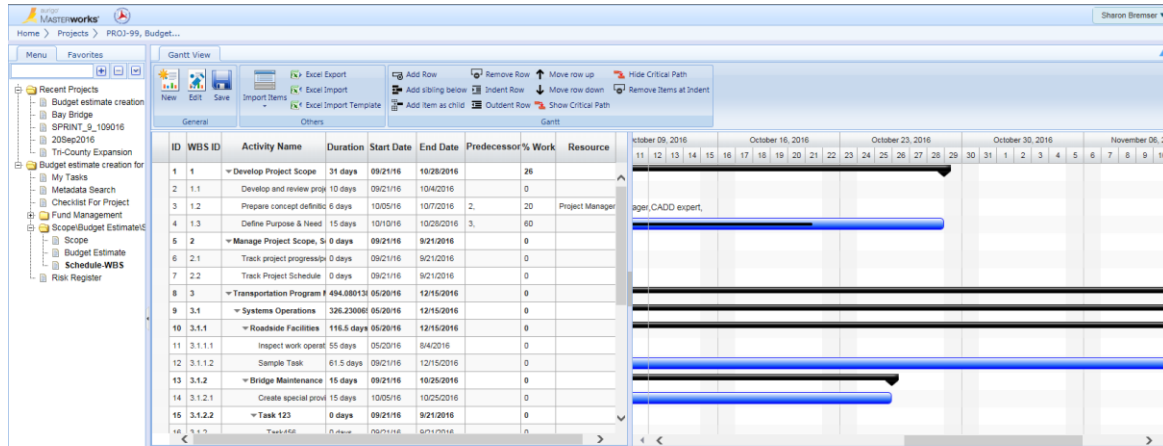
Select

Resources:

Resource	Resource Type	Indirect Cost	Rate in \$	Rate Level	Quantity	Cost in \$
<input type="checkbox"/> Structure Project Manager	Consultant	Home	70.00	Medium	6.00	420.00

Masterworks © Aurigo Software Technologies, Inc. All rights reserved. Version: 10.5.20161110.15 7:24 PM 11/21/2016

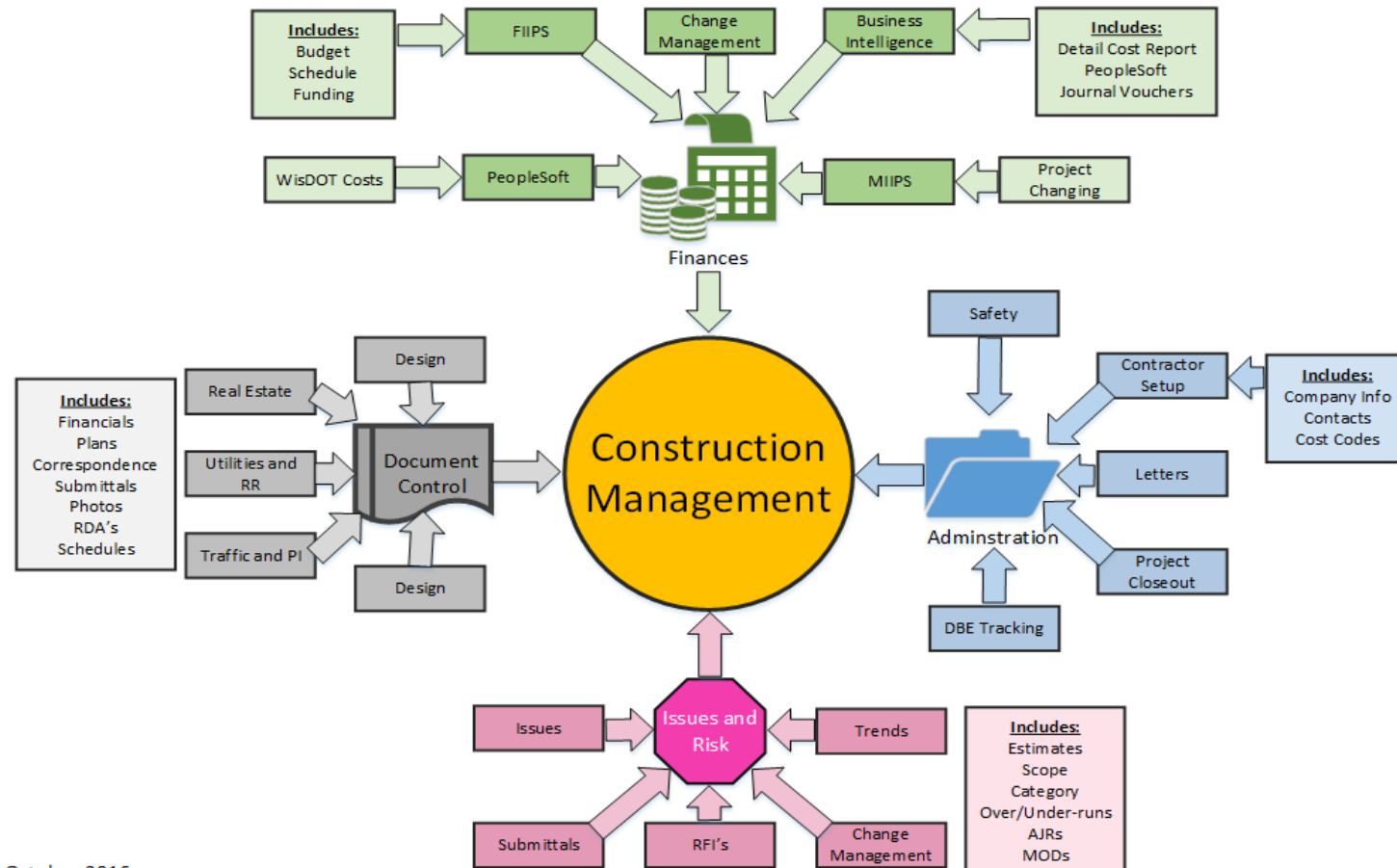
# Scheduling/Mapping/Location





# Document Control/Construction Management

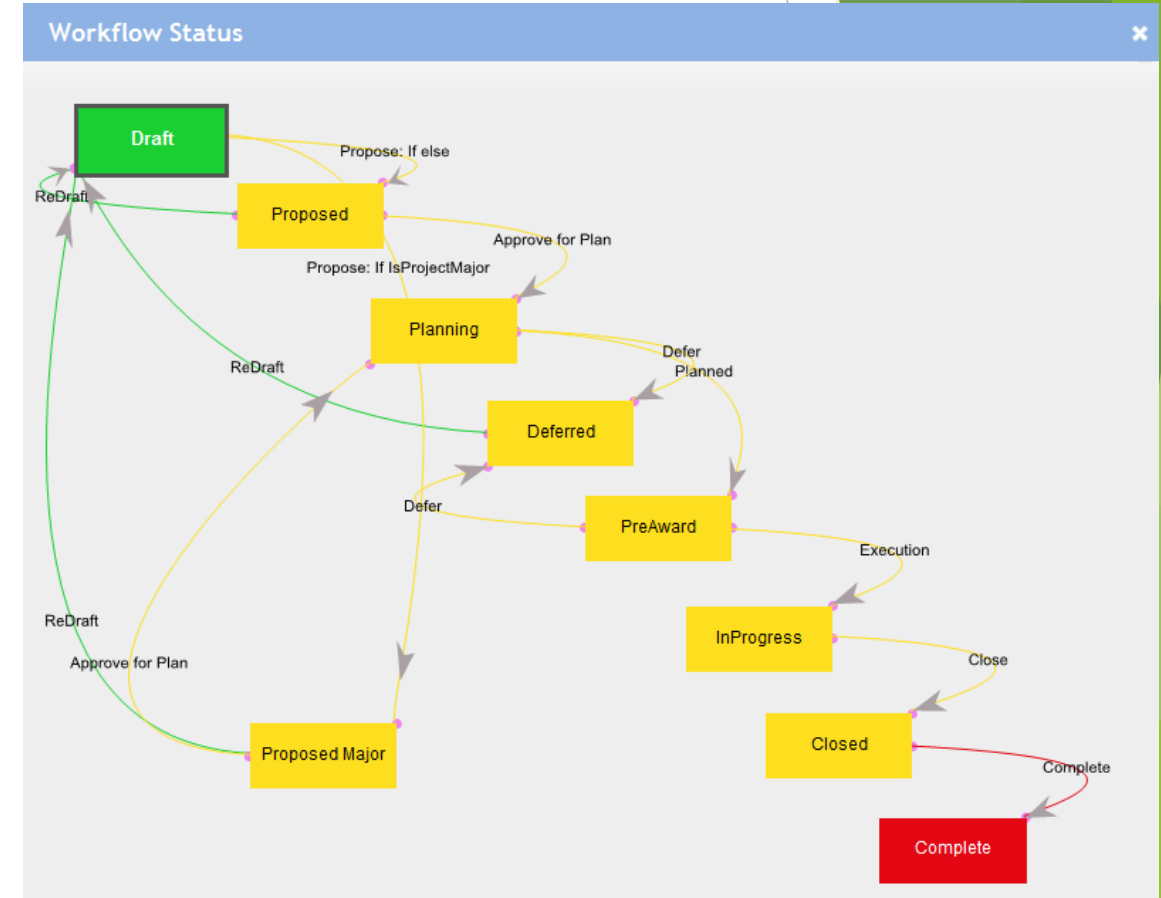
## WisDOT Construction Management Workflow



# Work Flow/Roles/Security

**WisDOT/Consultant/Contractor**

**Approve/Approver**  
**Review/Reviewer**  
**Submit/Submitter**  
**Publish/Publisher**  
**Create/Creator**  
**Edit/Editor**  
**Update/Updater**



# Reporting

DesignSettings

SaveCancelPreviewUndoRedo

General

Group Layout

Section

Section With Header

Section With Border

Two Column Layout

Three Column Layout

Spacer

Simple Input Controls

Single line text

Multi line text

Date

Numeric

Integer

TimeInput

DropDownList

Listbox

CheckBox

RadioButtonList

Formatted Input

Password

Label

Rich Text

CheckBoxList

Hidden

Advanced Controls

Child Data Containers

RFI ID: \*

Subject:

Drawing Location:

Specification Page:

Submitted Date: 05/11/2012

Target Response Date: 05/11/2012

15

Project Code:

Project Name:

Contract Name:

ApplyDelete

Caption

RFI ID:

Name

RFID

Type

TextBox

Width

Value

Validations

Required, Unique

PrimaryKey

False

ForeignKey

False

VisibleIf

EnableIf

ListItems

Data Source

Title or Section of Work

Title: \*

Item:

Description of Work:

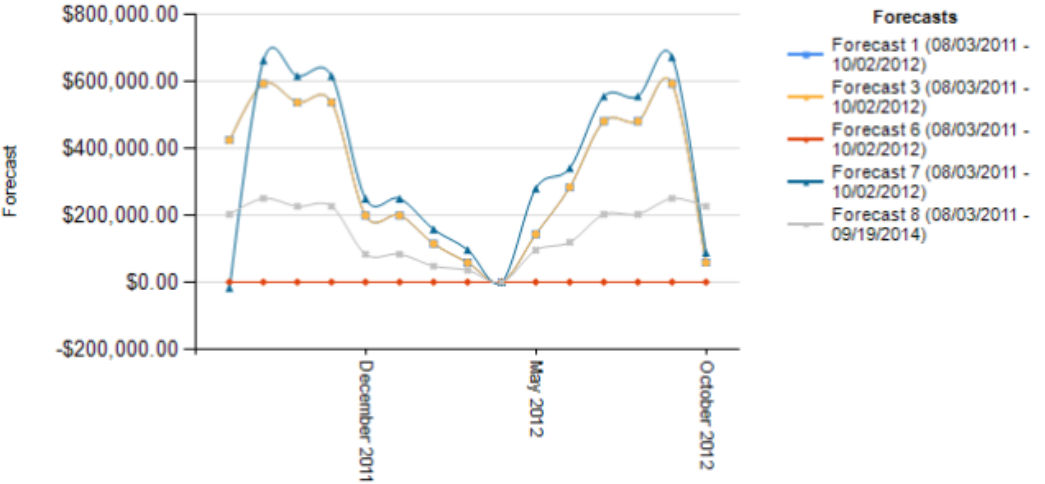
Request To:

To: Project Users

User: - Select Project

Contractor: - Select Contractor

Email:



Cost view

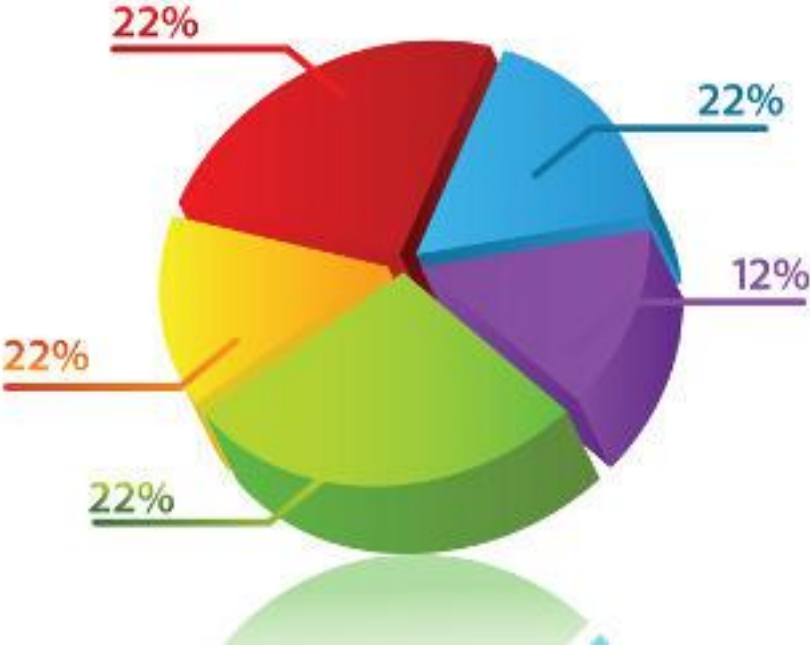
Back

Customize List

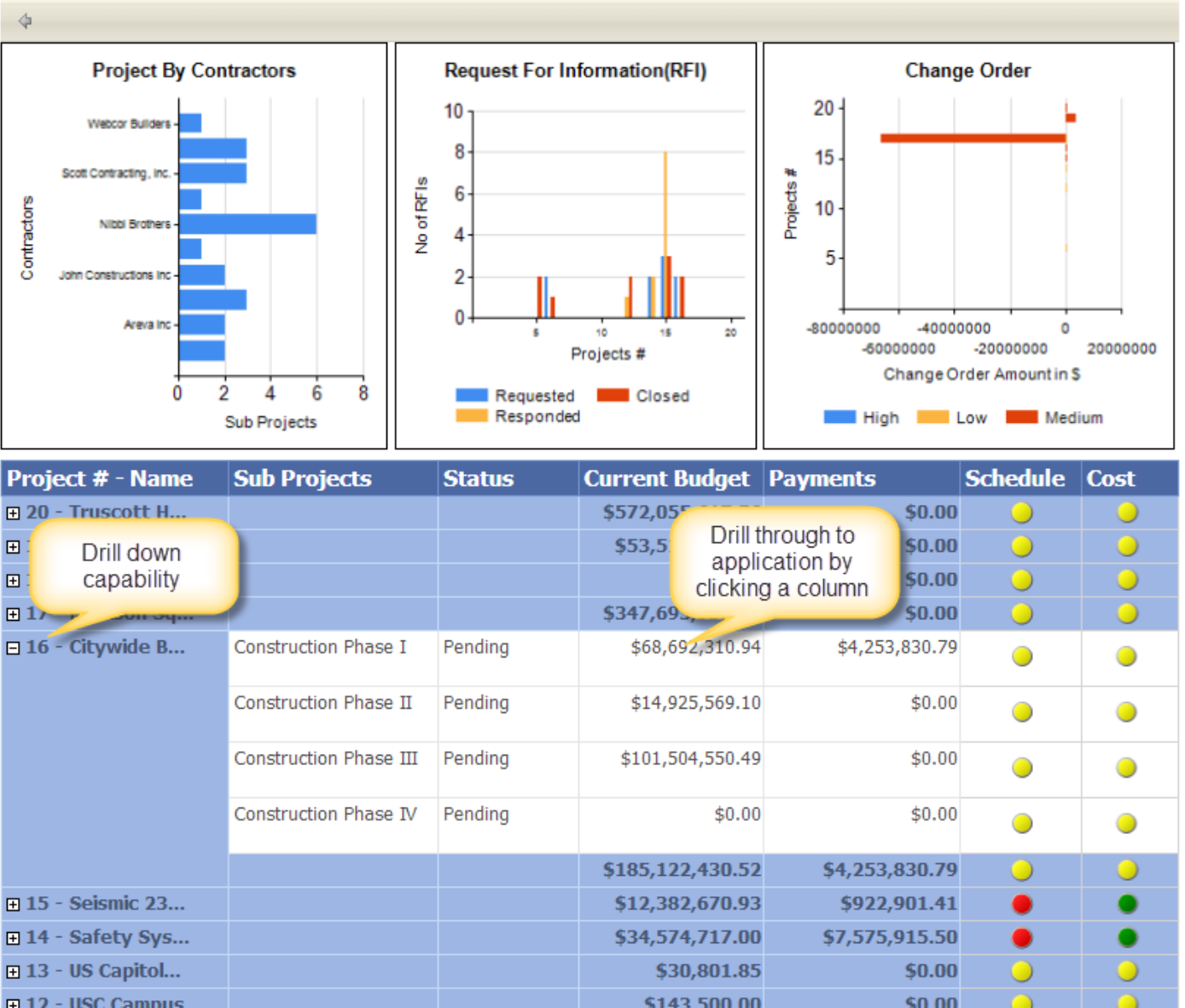
Others

Name	Complete %	Original Contract / Contract Cost	MOH Payment	MOH Recovered	Payments (\$)	Total Work Done (T
Track Standard Items	0.00%	0.00	0.00	0.00	0.00	0.00
Admin	32.82%	97,500.00 / 97,500.00	0.00	0.00	32,000.00	32,000.00
3000-1	0.00%	54,000.00 / 54,000.00	0.00	0.00	0.00	0.00
3000-2	100.00%	4,500.00 / 4,500.00	0.00	0.00	4,500.00	4,500.00
3000-3	0.00%	0.00 / 0.00	0.00	0.00	0.00	0.00
3000-4	75.00%	4,000.00 / 4,000.00	0.00	0.00	3,000.00	3,000.00
3000-5	80.00%	20,000.00 / 20,000.00	0.00	0.00	12,000.00	12,000.00
3000-6	0.00%	5,000.00 / 5,000.00	0.00	0.00	2,500.00	2,500.00
3000-7	0.00%	0.00 / 0.00	0.00	0.00	0.00	0.00
3000-8	100.00%	10,000.00 / 10,000.00	0.00	0.00	10,000.00	10,000.00
3000-9	0.00%	0.00 / 0.00	0.00	0.00	0.00	0.00
3000-10	0.00%	0.00 / 0.00	0.00	0.00	0.00	0.00

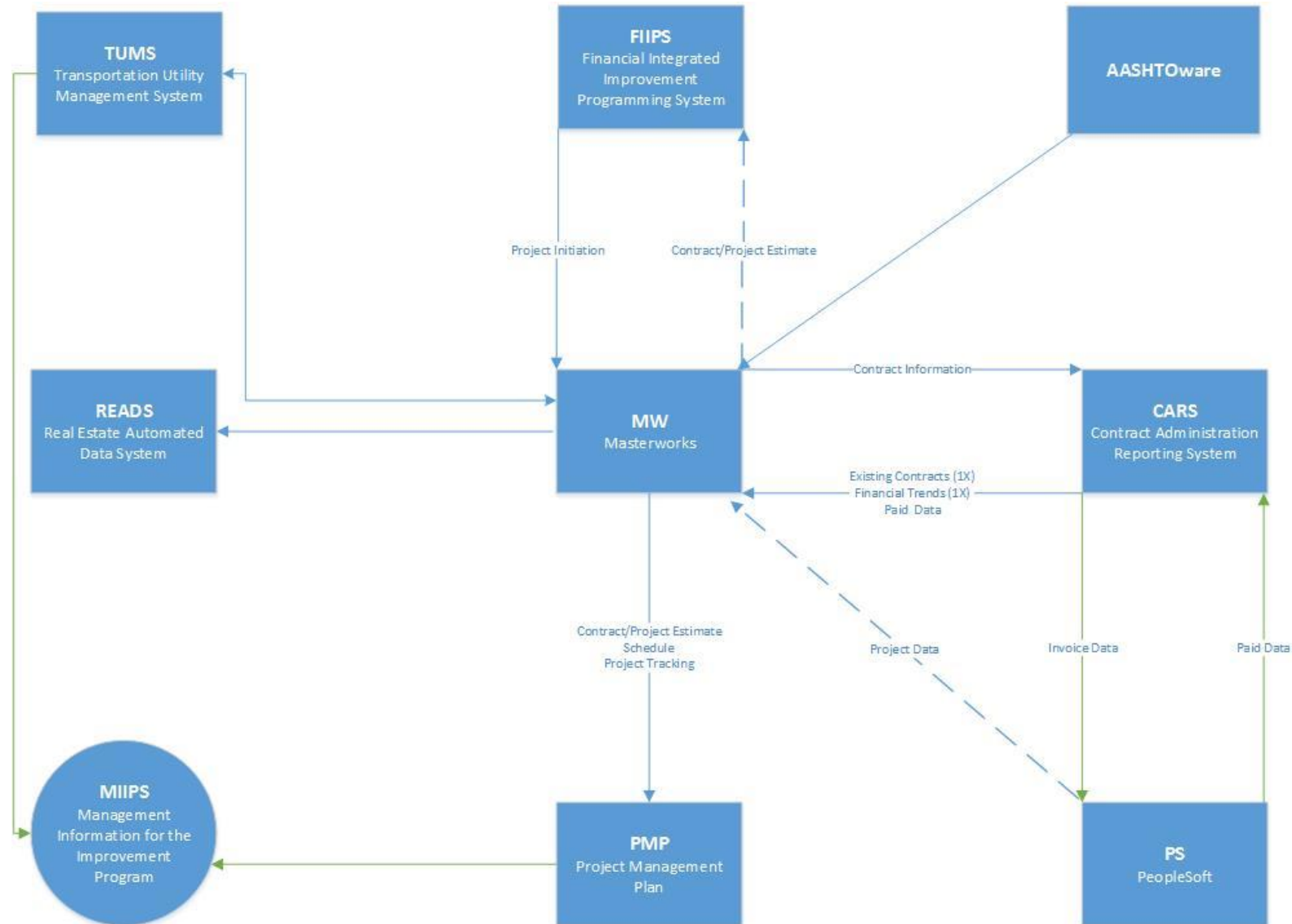
# Dashboarding



Budget  
Encumbrance  
Spent  
Schedule  
People  
Work Days



# System Integration






# Consultant Administrators

- ▶ Will work with industry to send out information early
- ▶ Will have open sign up starting in April timeframe
- ▶ Will describe duties and have training available for firms to discuss
- ▶ Will need help spreading the word
- ▶ Duties:
  - ▶ User Management within firm
  - ▶ Consultant Profile/Library information
  - ▶ Support and Training




# System Access



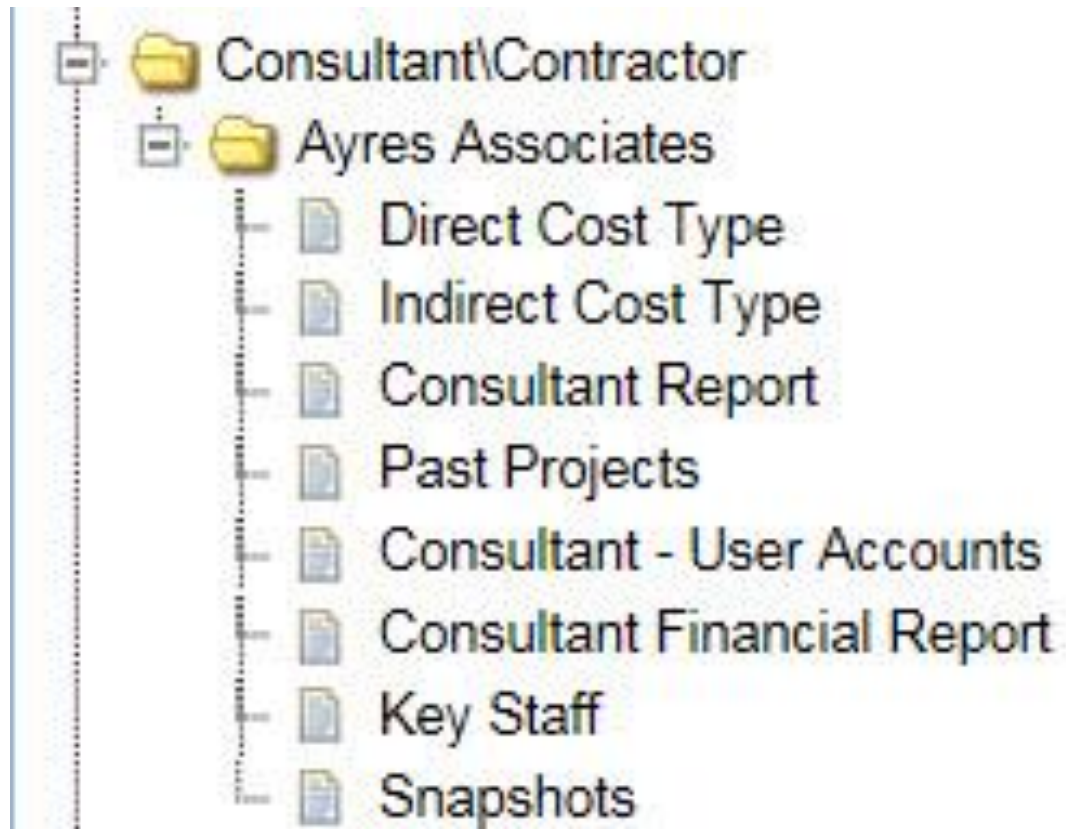
Username

Password

[New User!](#)   [Forgot password?](#)



# Consultant Libraries/Application/Registration



# Consultant Registration



General CFR Questionnaire CFR Direct Cost Summary

Save Cancel

General

Firm Name : Ayres Associates

Explain any Business combinations :

**Revenue Information**

Business Activity During Period	Total as Prime and Sub Consultant
WISDOT Gross Revenue	<input type="text" value="0.00"/>
Other Customer Revenue	<input type="text" value="0.00"/>
Total Firm Gross Revenue	<input type="text" value="0.00"/>

Number of States in which the consultant operates :

List States in which the consultant operates :

Firm's Cognizant State :

Has Firm received a cognizant review/audit acceptance? :

If yes, list the state or agency that performed the review/audit and the name and contact information of representative for State or Agency :

Has a cognizant review/audit commitment been made by a State or Agency? :

If yes, list the state or agency that Committed and the name and contact information of representative for State or Agency :

**Accounting Information**

**Attachments**

Document Name	Title	Uploaded By	Uploaded Date	Delete
No Attachments available				

Link Document Upload Document Download Template

Consultant Report

Save Cancel Instructions

General Others

Firm Name : Ayres Associates

Legal Name :

Firm Type :

Address 1 :

Address 2 :

Address 3 :

City :

State :

Country :

Zip Code :

Name of Parent Company & Address :

**Profile of Firm's Project Expenditure (Last 5 years)**

Profile Code	Profile Description	Number of Projects	Total Gross Fees (In Thousands)
No records to display.			

Add Edit Delete

# Scope of services needed



<input type="checkbox"/>	<input type="checkbox"/> Project Management
<input type="checkbox"/>	<input checked="" type="checkbox"/> Scope, Schedule and Change Management
<input type="checkbox"/>	<input checked="" type="checkbox"/> Budget, Cost, Procurement and Resource Management
<input type="checkbox"/>	<input checked="" type="checkbox"/> Quality and Risk Management
<input type="checkbox"/>	<input checked="" type="checkbox"/> Communication and Stakeholder Management
<input type="checkbox"/>	<input type="checkbox"/> Preliminary and Final Design
<input type="checkbox"/>	<input checked="" type="checkbox"/> Pavement and Soils Design
<input type="checkbox"/>	<input checked="" type="checkbox"/> Engineering and Plan Development
<input type="checkbox"/>	<input checked="" type="checkbox"/> Data, Survey, and Mapping
<input type="checkbox"/>	<input checked="" type="checkbox"/> Environmental and Cultural Impact
<input type="checkbox"/>	<input checked="" type="checkbox"/> Structures
<input type="checkbox"/>	<input checked="" type="checkbox"/> Traffic Operations
<input type="checkbox"/>	<input checked="" type="checkbox"/> Real Estate, Railroad and Utilities

\*list does not represent activity level

<input type="checkbox"/>	<input type="checkbox"/> Construction Management
<input type="checkbox"/>	<input checked="" type="checkbox"/> Post-PSE through Letting
<input type="checkbox"/>	<input checked="" type="checkbox"/> Post-Let Pre-Construction Project Management
<input type="checkbox"/>	<input checked="" type="checkbox"/> Construction Contract Administration
<input type="checkbox"/>	<input type="checkbox"/> Program Management
<input type="checkbox"/>	<input checked="" type="checkbox"/> Policy Development and Program Controls
<input type="checkbox"/>	<input checked="" type="checkbox"/> Systems Planning
<input type="checkbox"/>	<input checked="" type="checkbox"/> Systems Operations
<input type="checkbox"/>	<input checked="" type="checkbox"/> Technical Services



# Solicitation/NOI

The screenshot shows the WisDOT Masterworks application interface. The left sidebar contains a navigation menu with options: Home, Projects, Solicitation, Library, and Administration. The main content area displays a 'Solicitation List' table. The table has columns for Solicitation ID, BI Monthly Soli, BI Monthly Soli, Project ID, Project Description, Region/Bureau, Route, Roster/Open, City/Town/Village, and DBE Goal. The table lists several solicitations, including BBS-03, BBS-04, BBS-05, BBS-06, and BBS-07. The bottom of the screen shows the version number: 10.3.20161003.18.

Solicitation ID	BI Monthly Soli	BI Monthly Soli	Project ID	Project Description	Region/Bureau	Route	Roster/Open	City/Town/Village	DBE Goal
BBS-03			1001-01-04	Bridge Replacement Expansi	Bureau of Business Services	HWY 23	Roster	TOWN OF ARLAND, TOWN	
BBS-03			1001-01-05	Bridge Replacement Expansi	Bureau of Business Services	HWY 23	Roster	TOWN OF BARKSDALE, TO	
BBS-04			P2408201601	Highway no-21 E	Bureau of Business Services	HWY 21	Roster	CITY OF WASHB	
BBS-04			WP-2508	New Bridge Cons	Bureau of Business Services	1	Roster	CITY OF ADAMS	
BBS-05			P002		Bureau of Business Services	High way 16	Roster	CITY OF WISCOI	
BBS-06			P002		Bureau of Business Services	High way 16	Roster	CITY OF WISCOI	
BBS-07									



Region/Bureau : Bureau of Business Services

NOI Type : Construction

Solicitation Month and Year : February 2013

Solicitation Due Date and Time Zone : 10/04/2016 12:00

Solicitation ID : BBS-03

Roster/Open : Roster

Reviewers Shortlist needed : ☐ Yes ☒ No

Reviewers Ranking needed : ☐ Yes ☒ No

Solicitation Type : Master

**Projects**

Project ID	Project Description	Region/Bureau	Route	City/Town/Village	DBE Goal
1001-01-04	Bridge Replacement Expansi	Bureau of Business Services	HWY 23	TOWN OF ARLAND, TOWN	
1001-01-05	Bridge Replacement Expansi	Bureau of Business Services	HWY 23	TOWN OF BARKSDALE, TO	

The screenshot shows the WisDOT Masterworks application interface with the 'NOI' (Notice of Interest) form open. The form is titled 'NOTICE OF INTEREST QUESTIONNAIRE Wisconsin Department of Transportation'. It contains fields for NOI ID, Solicitation ID, Region/Bureau, Solicitation Date, Solicitation type, NOI Due Date, Firm Name, Street Address, Area Code - Telephone Number, Area Code - FAX Number, State, and Zip code. The form is currently blank, with only the 'Cancel' button visible in the top left corner. The bottom of the screen shows the version number: 10.3.20161003.18.

NOI ID : NOI-36

Solicitation ID : BBS-03

Transportation Region/Bureau : Bureau of Business Services

Solicitation Date : February 2013

Solicitation type (Roster/Open) : Roster

NOI Due Date : 10/05/2016

Firm Name : L & T Eng

Area Code - Telephone Number :

Street Address :

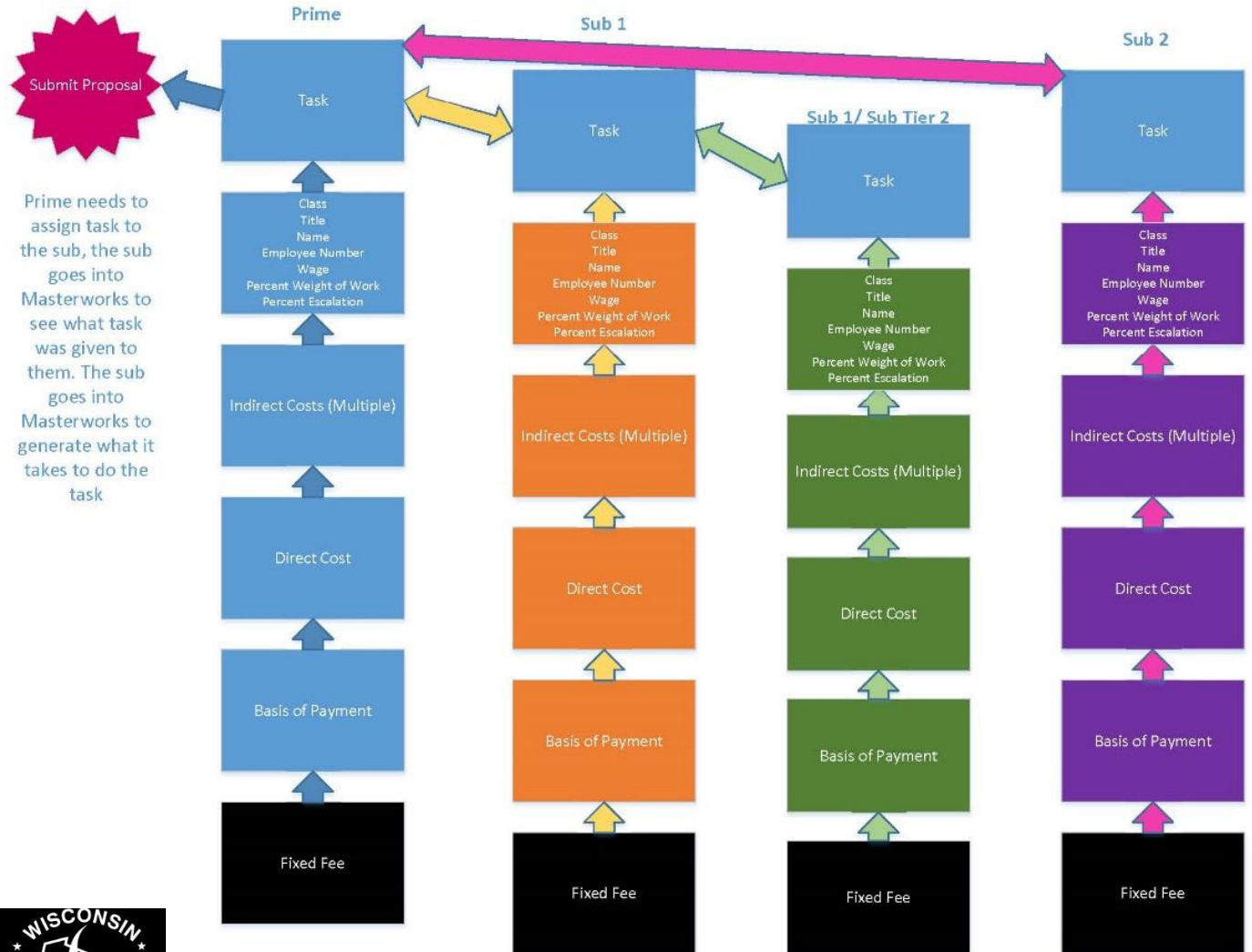
Area Code - FAX Number :

State :

City :

Zip code :

**Project(s)**

[illegible]

# Executed Contract

- ▶ Masterworks system will be log in encryption security for work flow approval
- ▶ Print out of contract will be available to file contract
- ▶ Source record stored in system for legal and records retention purposes
- ▶ Snapshot of approved record stored and archived



# Training

## Audiences:

- ▶ WisDOT Contract Specialist - Contract Supervisors
- ▶ WisDOT Planning - PDS project staff
- ▶ WisDOT Negotiators - Contract Development - Project Management
- ▶ WisDOT Secretary - Contract Approval - Governor Approval
  
- ▶ Consultant Administrators
- ▶ Consultant Financial and Administration
- ▶ Consultant NOI Responders
- ▶ Consultant Negotiators- Contract Development
- ▶ Consultant Contract Management

Options: Face to Face - Job Aide Document- Training Video - Train the Trainer



# Implementation Schedule

- Training - May 2017 - December 2017
- Project Estimate/Resourcing/Management - April 2017
- Contract Solicitation - July-August 2017
- Contract Selection - August 2017
- Contract Negotiation - August 2017 - December 2017
- Construction Management - December 2017





# Questions



- ▶ Sharon Bremser, PE - [sharon.bremser@dot.wi.gov](mailto:sharon.bremser@dot.wi.gov) - 608-215-5317
- ▶ <http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/contracts/econtract.aspx>